

various. Some are principally composed of oyster shells, others principally of scallop, some again principally of clam, and in others nearly the whole bed consists of *perna*, commonly known by the name of pearl shell. These last furnish decidedly the best marl. The *perna* is a broad, thick shell, somewhat in the shape of a large oyster, of a white pearly appearance, peeling off in thin laminæ that are very soft and friable. When exposed to the atmosphere for a short time it falls into an almost impalpable dust, consisting essentially of carbonate of lime. This shell occurs in most of the marl beds of the Eastern Shore, but more especially in those of Talbot county, and as already stated, at the head of Reed's creek, in Queen Ann's county.

The quality of the marl is also greatly influenced by the nature of the shells that compose it. It was stated in the former report, and may be repeated here, in illustration of what has to be said under the present head, "that those beds which consist principally of *clam shells*, usually associated with numerous varieties of other smaller bivalve and univalve shells, containing at the same time very little admixture of foreign ingredients, yield a marl which exhibits its beneficial effects upon the soil in a very short time; because the calcareous particles are derived from shells which are very prone to disintegrate when exposed to the atmosphere. Marl beds composed entirely or principally of *oyster shells*, are much less valuable, because of the slow disintegration and decomposition of this species of shell, *scallop shells* resist such decomposition still more obstinately than do oyster shells, and when they occur, as they have been observed to do, in extensive beds firmly agglutinated by an argillo-ferruginous cement, they are useless in all soils, and may be positively injurious to some."

It follows then, that the nature of the material in the shell marl deposits must be ascertained first in reference to the species of shells which it encloses, and their admixture with foreign ingredients, as clay, sand, gravel, &c. This can be done by a simple inspection aided by such experience and knowledge as can be acquired without any difficulty. But a more important consideration relates to the composition of the marl, and especially to